## AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

## LISTING OF CLAIMS:

1. (Currently amended)    In a finishing system having at least one finishing device that is controlled separately from production equipment and having a controller with access to device-dependent parameter information, including constraints for the at least one finishing device, with access to a description of the workpieces of a job, and with access to the manner in which such workpieces are to be finished, a method for an automated production monitor control function, comprising:

a)    selecting at least one finishing device for use during finishing of the workpieces;

b)    identifying constraints of the selected device <u>comprising production limitations of the one finishing device against completion of workpiece processing by the finishing system</u>; and

c)    specifying, with the controller, job segments of workpieces such that the attributes of each job segment do not exceed the identified constraints.

2. (Original)   The method of **claim 1**, wherein:

a)    the step of selecting further comprises selecting at least two finishing devices for performing a first and a second finishing operation on the same job segment; and

b)    the step of identifying further comprises creating a set of combined constraint parameters relating to the combination of selected devices.

3. (Original)   The method of **claim 1**, wherein the step of selecting further comprises:

a)    retrieving device-dependant parameters relating to a plurality of finishing devices; and

b) selecting a subset of the finishing devices based upon an

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optimization algorithm.

4. (Original)  The method of **claim 1**, wherein the step of specifying occurs prior to production of the workpieces.

5. (Original)  The method of **claim 1**, further comprising retrieving device-dependent parameter information from a database wherein device-dependent parameters for the finishing device is stored.

6. (Original)  The method of **claim 5**, wherein the step of retrieving comprises retrieving constraint information concerning only those finishing devices that are available for performing the finishing operation.

7. (Original)  The method of **claim 1**, wherein the step of selecting further comprises:

a)  identifying a plurality of threads capable of performing the finishing operation; and

b)  using an optimization algorithm to select at least one thread to be used in performing the finishing operation.

8. (Original)  The method of **claim 7**, further comprising soliciting user input concerning selection of at least one thread to be used in performing the finishing operation.

9. (Original)  The method of **claim 1**, further comprising selecting a document form with which the job segment will conform.

10. (Original) The method of **claim 1**, further comprising:

a)  creating a job model comprising hierarchically-related nodes; and

b) associating descriptive information pertaining to different portions of the job to different nodes within the job model.

11.  The method of **claim 10**, further comprising using the job

model information during the step of selecting at least one finishing device for use during finishing of the workpieces.

12. (Original) The method of **claim 10**, wherein the step of associating descriptive information comprises associating document form attributes to a document node in the job model.

13. (Original) The method of **claim 12**,

a)    wherein the step of selecting at least one finishing device further comprises identifying a plurality of threads capable of performing the finishing operation; and

b)    further comprising the step of determining whether each identified thread conforms with document form attributes associated with the document node of the document being finished.

14. (Original) The method of **claim 10**, wherein the step of associating descriptive information comprises associating content files with a component node in the job model.

15. (Original) The method of **claim 10**, further comprising checking to ensure that each node of the job conforms to a selected set of document form rules.

16. (Original) The method of **claim 1**, further comprising encoding integrity descriptors for at least one job segment.

17. (Original) The method of **claim 16**, further comprising generating an integrity descriptor code that forms a pointer to integrity descriptors stored elsewhere.

18. (Original) The method of **claim 1**, further comprising generating a fetch sheet for job segments comprised of workpieces to be fetched for finishing.

19. (Original) The method of **claim 1**, further comprising generating a job segment identifier code.

20. (Original) The method of **claim 1**, further comprising generating a job segment identification sheet.

21. (Original) The method of **claim 1**, further comprising generating a traveler sheet for at least one job segment.

22. (Original) The method of **claim 1**, further comprising:

a)       selecting at least one thread capable of performing at least one portion of the finishing operation;

b)       generating a job segment identifier code; and

c)       storing the job segment identifier code and a description of the selected thread in a system database.

23. (Original) The method of **claim 1**, further comprising generating a virtual finishing job ticket and storing a copy of such virtual finishing job ticket in a system database.

24. (Original) The method of **claim 1**, wherein:

a)       the step of selecting comprises selecting a plurality of finishing devices; and

b)       the step of specifying further comprises specifying different job segments applicable to performance of different finishing devices.

25. (Original) In a finishing system having at least one database for storing information concerning the capability and constraint attributes of devices to be used within the system and for storing job segment description information and having a description of the components of a job together with the order in which the components are to be assembled, a method of a production monitor controller, comprising:

a)       retrieving from the at least one database information concerning the capabilities and constraints of devices to be used within the

assembler/finisher system;

     b)     selecting at least one device within the assembler/finisher system for processing of the job;

     c)     determining the combined constraint attributes of the selected at least one device <u>wherein the constraint attributes comprise production limitations of the one device against completion of job processing by the assembler/finisher system</u>; and

     d)     segmenting the workpieces of the job such that the attributes of each segment do exceed the combined constraint attributes of the selected at least one device.

     26. (Original) In a production system having a plurality of devices controlled separately from each other and having a controller with access to device-dependent parameter information, including constraint attributes for at least one of the plurality of devices, and with access to at least one database of storing job segment description information, and with access to a description of the workpieces of a job and to the manner in which such workpieces are to be produced, a method for a production monitor control function, comprising:

     a)     retrieving information concerning the device dependent parameters of devices for performing the production job;

     b)     selecting at least one device for performing the job;

     c)     identifying the device dependent constraint parameters of the selected device; and

     d)     segmenting the workpieces of the job such that the attributes of each segment do not exceed the set of identified constraint attributes.